



# G2 Modem Router

The G2 is a dual port ADSL2+ router with an embedded x86 processor, capable of providing broadband internet speeds up to 48Mbps downstream and 4 Mbps upstream.

Suitable for the Small Office, Home Office (SOHO), as well as Small and Medium Enterprise (SME) environments, the G2 provides enormous capability in a compact package. The G2 can be configured as a gateway router for many applications:

- Firewalls
- Servers
- VOIP
- Videoconferencing
- IPTV
- Wireless base station

Powered by a 500MHz x86-based embedded processor (AMD LX-800) the G2 is well suited for multiple applications that could previously only operate on large and expensive hardware. The x86 architecture provides power and flexibility, plus the opportunity to run existing Linux software, without the need to port or rewrite code.

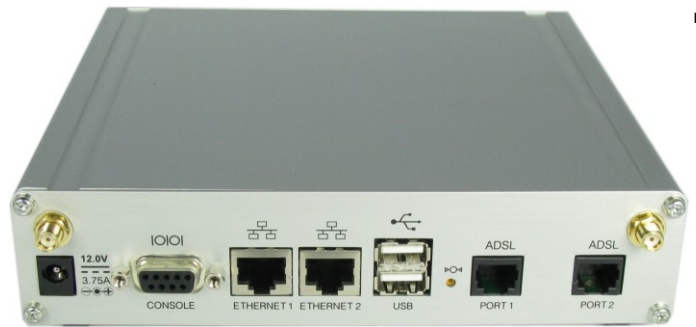
The individual ADSL2+ ports can be bonded together for extra bandwidth or can operate independently. When operated independently, different traffic types can be routed on separate ADSL links e.g. one link for data, the other for VOIP. The individual ports can also be used for redundant links, with different carriers or even different ADSL types including (ADSL1, ADSL2, ADSL2+, Annex A and Annex M).

Two independent Network Interface Controllers (NICs) allow separate configurations for each network port. Different security levels can be set for each network which is ideal for hosting a public server and a private LAN with the same internet connection. Alternatively each network can be routed to ADSL ports independently.

The G2 comes with a programmed BIOS, ready to boot a payload straight from Compact Flash. Supply your own software image or use one of the many open source software kernels to be up and running.

## Software & Drivers

- All device drivers for the G2 are included in the Linux Kernels (version 2.6.23 and later).
- BIOS is an open source coreboot <http://www.coreboot.org>



## Connectors & Interfaces

- 2.5mm x 5.5mm DC power socket
- DB9 female (Console – RS232 Serial)
- 2x RJ45 10/100 (Ethernet) Separate NICs
- 2x USB 2.0 (Type A)
- 2x RJ11 (ADSL)
- Mini PCI socket
- Compact Flash socket
- 44pin IDE header
- 2x SMA male (Half wave WLAN antenna) – G2W



## Indicators, Buttons & Controls

- 13x indicating LEDs  
Power (green)  
ADSL Link (green) and data (yellow) for each port  
Ethernet Link (green) and data (yellow) for each port  
3x software configurable (blue, green and red)  
IDE (red)
- Software configurable button – intended for restoring default settings.
- Buzzer





# G2 Modem Router

## Standard Models

The G2 is available in three configurations: G2P, G2S and G2W. The G2P is supplied as a PCB only, which complies with the standard Mini-ITX form factor. It can easily be installed in any Mini-ITX case or in a rack mounted enclosure. The G2S is the standard package in a compact and robust anodised enclosure, while the G2W has the addition of wireless LAN capability.

Models	G2P	G2S	G2W
G2 PCB fitted with BIOS & RTC battery	•	•	•
White Box Packaging		•	•
Enclosure – anodised aluminium		•	•
45W power supply		•	•
RJ11 ADSL cable (2m)		• 2	• 2
RJ45 Ethernet cable (2m)		• 2	• 2
Mini PCI socket	•	•	used
WLAN 300Mbps IEEE 802.11n/g/b (mini PCI)			•
SO-DIMM DDR RAM – DDR 400MHz		Accessory	
1Gb Compact Flash		Accessory	

## Accessories

- SO-DIMM DDR RAM: 256Mb or 512Mb
- Compact Flash Card: Industrial grade – 1Gb
- Regulated Power Supply – 12V 3.75A (45W)
- Cables
- RJ45 CAT5e Ethernet networking cable (2m)
- RJ11 ADSL cable (2m)
- DB9 M-F Serial cable (2m)

## Power Supply

- 12V DC 45W
- Mains power supply:  
3 prong IEC-320 C14 Inlet (mains lead not supplied)  
100-240V AC 1.05-0.55A 47-63Hz

## Branding

A front panel resin decal is available to provide LED labelling; These decals can be customised for OEM applications. (MOQs apply). The G2S and G2W models are supplied in white box packages for the ease of re branding. Simply apply a printed sticker or sleeve to the box to brand it your own.

## Size And Weight

- Enclosure: Fits within 1RU & Stackable
- PCB: Mini ITX form factor: 171.9mm x 170.1mm x 29.6mm
- White box packaging 320mm x 260mm x 60mm (1.7kg packed).



## Standards & Protocols

- ITU G.992.1 (G.DMT) Annex A
- ITU G.992.3 (ADSL2) Annex A
- ITU G.992.5 (ADSL2+) Annex A
- ITU G.992.5 (ADSL2+) Annex M
- Native ATM class device with Hardware SAR
- Multi Link PPP (RFC1717)
- PPP over ATM (RFC 2364 PPPoA)
- PPP over Ethernet (RFC 2516 PPPoE)
- Bridged Ethernet over ATM (RFC 1483)

## Compliance (G2S & G2W)

- Australia
  - AS/NZS 60950 (Safety)
  - AS/ACIF S041 (ACMA)
  - AS/ACIF S043 (ACMA)
  - AS/ACIF CSPIR 22:2006 (ACMA)
- Europe
  - EN55022 – CSPIR 22 (EMC)
  - EN55024 – CSPIR 24 (Immunity)

## Environmental

- RoHS Compliant, Lead (Pb) Free.
- Temperature – Operating range: 0-50 °C

